



A Focus on the Environment
and
Going Beyond

2002 E2 Progress Report

The Southeastern Public Service Authority (SPSA) continually strives for environmental excellence and turning trash into treasure. At SPSA, it is our mission to manage and operate environmentally responsible solid waste collection, processing, and disposal programs and facilities. SPSA is steadily working to reduce the amount of waste deposited in Regional Landfill and increasing the amount of materials that are recycled through various programs. SPSA is continually investigating its operations to ensure environmental soundness and implement pollution prevention.

As such, SPSA is honored to be an E2 Participant in the DEQ Virginia Environmental Excellence Program. To retain our participation, we respectfully submit to DEQ current achievements and improvements for 2002 and future projections for 2003.

EMS Developments and General Environmental Improvements

- The EMS Team conducted site visits at various SPSA facilities to assess the need for environmental improvements. This is an ongoing process.
- SPSA's Environmental Policy has been incorporated SPSA-wide, where the policy is posted at designated bulletin board areas. Members of the EMS Team trained all SPSA employees on the policy and the development of our EMS, as well as incorporated the policy and the development of our EMS in new employee orientation.
- SPSA employees installed screens on the storm drains at the Refuse Derived Fuel (RDF) Plant complex and the Power Plant facilities to prevent discharge of litter and debris into receiving drainage areas. This project was completed in June 2002.
- The SPSA internal recycling initiative began February 2001, where recycling bins were placed at the following SPSA facilities: Regional Office Building, Power Plant, RDF Plant, Operations Building, Recycling Fleet and Administration Building, Suffolk Composting Facility, Virginia Beach Yard Waste Processing Facility, and the Regional Landfill. Participation has remained at 30% and it is our goal to increase to 50% by next year.
- Internal audits are being conducted on a quarterly basis for multimedia facilities based on the facility's permits and regulatory requirements. The Regional Landfill, Transfer Stations, Yard Waste Facilities, and Tire Processing Facility inspections began 3rd Quarter 2002 and the WTE facility inspections are effective 1st Quarter 2003.
- All SPSA facilities (with the exception of the unmanned Ivor and Boykins Transfer Stations) began using electronic swipe cards in January 2003. This practice replaced punch paper clocks, which eliminated the paper waste stream completely. Prior to the implementation of this system, 52 weeks worth of cards for 409 employees and 936 sheets of labels annually were used.

Household Hazardous Waste Program

- In January 2002, SPSA formed a partnership with A & B Propane (commercial propane business) to recycle propane cylinders and tanks. Since January 2003, A & B Propane has been recycling the propane gas. The cylinders are transported to A & B where propane is recovered and reused, and the cylinder is either reused or recycled as scrap metal. From July 2002 to January 2003, 331 propane cylinders have been recycled.
- In November 2002, SPSA began working with Inmetco to recycle alkaline batteries. The recycled components are used in the production of stainless steel remelt alloys. From July 2002 to January 2003, 408 lbs. of alkaline batteries were recycled.
- In November 2002, SPSA partnered with the Rechargeable Battery Recycling Corporation (RBRC) for the recycling of ni-cad batteries from portable electronic equipment for the manufacturing of new batteries and stainless steel products. From July 2002 to January 2003, 104 lbs. of rechargeable batteries were recycled.
- In October 2002, SPSA began recycling lead acid batteries. From July 2002 to January 2003, 942 lead acid batteries were recycled.
- In October 2001, SPSA began recycling freon cylinders. Freon is transferred via a freon recovery machine to a 100-lb. cylinder. Empty cylinders are taken to Bi-Metals Corporation at SPSA Regional Landfill for recycling. When the 100-lb. cylinder is full, a contractor picks it up for reuse and exchanges it for a new one. The contractor buys back pure gas and the impure gas is collected by the same contractor to ensure their proper disposal. From July 2002 to January 2003, 84 lbs. of freon has been collected for recycling.

Waste-to-Energy

- At the RDF Plant, processable waste is conveyed, shredded, and further conveyed to the Power Plant where the waste is burned for fuel. Prior to February 2002, processable reject waste (undersized waste products that were too small to go through the processing for incineration such as glass, small metals, and other small debris that would have fallen out and landfilled) was disposed of at the Regional Landfill. In February 2002, SPSA's RDF employees fabricated and installed a new process reject conveyor belt. The rejected material is now delivered to the Power Plant, where it is used for supplemental fuel and exposes this waste stream to further recycling for ferrous metal recovery. This process decreases landfilled waste, saves on the amount of fuel (where it was transported to the Landfill), greatly increases metal recycling, and adds to the fuel stream created by the Power Plant (steam for energy at Norfolk Naval Shipyard).

- Since 1999, SPSA has had a Proprietary Waste Program, where businesses and government agencies can dispose of confidential or industrial waste. Waste types include confidential files, out-of-date or off specification consumer products, industrial process residue, and pharmaceuticals. The material is disposed of in a Direct Feed Building at the RDF Plant and conveyed directly to the Power Plant, where it is incinerated for steam as a source of energy. Through the proprietary waste program, businesses are assured that their privacy is protected. This also minimizes any environmental liability that may occur if materials are landfilled rather than incinerated.
- The program expanded in August 2002 to include the disposal of liquid materials. The material in drums, totes, or bulk tank trucks are weighed at the RDF Plant, then transported and unloaded into contained storage tanks at the Power Plant. Progressive cavity pumps push the liquid from the tanks up to the RDF feed bins, where it is mixed with RDF, fed into the boilers, and incinerated. Prior to this program, most of the material was landfilled (liquids were solidified henceforth increasing the tonnage that was landfilled).
- In March 2002, SPSA completed construction of a decanting pit, which receives wet ash and permits the decanting of the liquid in the ash. The decanted liquid is then discharged to the settling ponds. This process reduced the weight of the ash transported to the landfill and significantly reduced free liquids in the ash.
- Wastewater minimization project improved in December 2002. SPSA replumbed the settling ponds into the dust suppression system surrounding the coal pile and the decanting pit. It incorporates evaporation as another removal process for wastewater, and saves an additional 10,000 gallons of city water per week.

Recycling

- Because of HIPAA (Health Information Privacy Protection Act Health Insurance Portability Accountability Act), businesses dealing with consumer information are required to completely destroy sensitive records and documents as opposed to simply landfilling the material. In February 2003, SPSA began a Document Destruction Program, where SPSA personnel pick up material from businesses and bring it to a secured shredding facility. The shredded material is directly fed to Power Plant where it is burned for energy (steam). The material types include paper records, CD-ROMs, DVDs, videotapes, and more.
- SPSA is currently evaluating implementing an automated curbside recycling system that will increase recycling bin volumes from 18 gallons to 95 gallons. This will promote more recycling and less landfilled material.

Volunteer Improvements and Award Achievements

- In April 2002, SPSA employees participated in the cleanup of wetlands on the shore of Paradise Creek, which neighbors the RDF Plant/Operations complex and is a discharge point for the complex's stormwater outfalls. Items that could be recycled were done so through SPSA's recycling program.
- In conjunction with the Elizabeth River Project, SPSA employees participated in a tree planting of 100 trees at the RDF Plant complex in November 2002. The trees will assist in the restoration of Paradise Creek to its natural habitat and help to minimize the amount of windblown debris.
- The Regional Landfill received a gold pretreatment excellence award from HRSD in May 2002 for exemplary compliance during 2001.
- SPSA's Household Hazardous Waste Program received a SWANA (Solid Waste Association of North America) silver award in October 2002.
- SPSA received the Curbside Recycling Award from the Norfolk Environmental Commission in October 2002.

The Forecast

- SPSA is in contract negotiations with an environmental consultant for assistance on our EMS and to further progress the path to ISO 14001 certification. SPSA targets full ISO 14001 certification within twelve months.
- SPSA is planning to construct a Suffolk Transfer Station on the Regional Landfill property. Construction will begin in April 2003 with an anticipated completion date of December 2003. Incoming processable waste at Regional that is now currently being landfilled will be diverted to Waste-to-Energy.
- SPSA intends to issue an RFP this month for vendor support to implement an e-recycling program by July 1, 2003. This program will support the collection and recycling of all electronic items. It will be dovetailed with SPSA's HHW program for collection service, but will be a stand-alone program.
- SPSA is currently evaluating implementation of a large-scale white goods collection and freon recovery service for all member communities.